

CLAIM AMENDMENTS

Please amend the claims as follows.

1. **(Original)** A method of increasing the conductivity of a fracture in a subterranean formation comprising the steps of:

providing a fracturing treatment fluid comprising a proppant composition, the proppant composition comprising proppant particulates and a degradable material capable of undergoing an irreversible degradation downhole;

introducing the proppant composition to the fracture; and

allowing the proppant composition to form a proppant matrix having voids in the fracture.

2. **(Currently Amended)** The method of claim 1 wherein the proppant particulates comprise sand, walnut hulls, or man-made proppant particulates ~~a man-made proppants~~.

3. **(Currently Amended)** The method of claim 1 wherein the proppant particulates have a size of about 10 to about 60 US mesh.

4. **(Original)** The method of claim 1 wherein the proppant composition further comprises a curable resin, a tackifying agent, or both.

5. **(Original)** The method of claim 4 wherein the curable resin comprises an epoxy, furan, phenolic, furfuryl aldehyde, or furfuryl alcohol resin.

6. **(Currently Amended)** The method of claim 1 wherein the proppant composition comprises interlocking proppant particulates.

7. **(Original)** The method of claim 1 wherein the degradable material comprises a degradable polymer or a dehydrated salt.

8. **(Currently Amended)** The method of claim 7 wherein the degradable polymer comprises a polysaccharide, a chitin, a chitosan, a protein, an aliphatic polyester, a poly(lactide), a poly(glycolide), a poly(ϵ -caprolactone), a poly(hydroxybutyrate), a polyanhydride, an aliphatic polycarbonate, a poly(orthoester), a poly(amino acid); a poly(ethylene oxide), or a polyphosphazene ~~polysaccharides, chitins, chitosans, proteins, aliphatic polyesters, poly(lactides), poly(glycolides), poly(ϵ -caprolactones), poly(hydroxybutyrates), polyanhydrides, aliphatic polycarbonates, poly(orthoesters), poly(amino acids); poly(ethylene oxides), or polyphosphazenes.~~

9. **(Original)** The method of claim 1 wherein the degradable material further comprises a plasticizer.

10. **(Original)** The method of claim 7 wherein the dehydrated salt comprises anhydrous sodium tetraborate or anhydrous boric acid.

11. **(Original)** The method of claim 1 wherein the degradable material comprises poly(lactic acid) and a compound chosen from the group consisting of sodium borate and boric oxide.

12. **(Original)** The method of claim 1 wherein the degradable material comprises a stereoisomer of a poly(lactide).

13. **(Currently Amended)** The method of claim 1 wherein the proppant composition comprises a poly(lactic acid) degradable material and bauxite proppant particulates, the bauxite proppant particulates at least partially having been coated with a curable epoxy resin, ~~and a polylactic acid degradable material.~~

14. **(Original)** The method of claim 1 wherein the degradable material is present in the proppant composition in an amount sufficient to create a desirable number of voids in the proppant matrix.

15. **(Original)** The method of claim 1 wherein the degradable material is present in the proppant composition in an amount of about 0.1% to about 30% by weight of proppant particulates in the composition.

16. **(Original)** The method of claim 1 wherein the degradable material comprises particles having a rod-like shape.

17. **(Original)** The method of claim 1 wherein the degradable material comprises an inorganic or organic compound.

18. **(Original)** The method of claim 17 wherein the inorganic or organic compound comprises sodium acetate trihydrate, L-tartaric acid disodium, salt dihydrate, sodium citrate dihydrate, hydrate of an inorganic acid, hydrate of an inorganic acid salt, sodium tetraborate decahydrate, sodium hydrogenphosphate heptahydrate, sodium phosphate, dodecahydrate, amylose, starch-based hydrophilic polymer, or a cellulose-based hydrophilic polymer.

19. **(Original)** The method of claim 1 wherein the degradable material is a composite.

20. **(Currently Amended)** A method of enhancing the permeability of a proppant matrix comprising the step of introducing a plurality of voids into the proppant matrix by a degradation of a degradable material within the proppant matrix.

21. **(Currently Amended)** The method of claim 20 wherein the proppant matrix comprises sand, walnut hulls, or man-made proppant particulates ~~a man-made proppant particulates~~.

22. **(Original)** The method of claim 20 wherein the proppant matrix comprises a curable resin, a tackifying agent, or both.

23. **(Original)** The method of claim 22 wherein the curable resin comprises an epoxy, furan, phenolic, furfuryl aldehyde, or furfuryl alcohol resin.

24. **(Original)** The method of claim 20 wherein the proppant matrix comprises interlocking proppant particulates.

25. **(Original)** The method of claim 20 wherein the degradable material comprises a degradable polymer or a dehydrated salt.

26. **(Currently Amended)** The method of claim 25 wherein the degradable polymer comprises a polysaccharide, a chitin, a chitosan, a protein, an aliphatic polyester, a poly(lactide), a poly(glycolide), a poly(ϵ -caprolactone), a poly(hydroxybutyrate), a polyanhydride, an aliphatic polycarbonate, a poly(orthoester), a poly(amino acid); a poly(ethylene oxide), or a polyphosphazene ~~polysaccharides, chitins, chitosans, proteins, aliphatic polyesters, poly(lactides), poly(glycolides), poly(ϵ -caprolactones), poly(hydroxybutyrates), polyanhydrides, aliphatic polycarbonates, poly(orthoesters), poly(amino acids), poly(ethylene oxides), or polyphosphazenes.~~

27. **(Original)** The method of claim 20 wherein the degradable material further comprises a plasticizer.

28. **(Original)** The method of claim 25 wherein the dehydrated salt comprises anhydrous sodium tetraborate or anhydrous boric acid.

29. **(Original)** The method of claim 20 wherein the degradable material comprises poly(lactic acid) and a compound chosen from the group consisting of sodium borate and boric oxide.

30. **(Original)** The method of claim 20 wherein the degradable material comprises a stereoisomer of a poly(lactide).

31. **(Currently Amended)** The method of claim 20 wherein the proppant matrix comprises a poly(lactic acid) degradable material and bauxite proppant particulates, the bauxite proppant particulates ~~having been~~ at least partially coated with a curable epoxy resin, ~~and a polylactic acid degradable material.~~

32. **(Original)** The method of claim 20 wherein the degradable material is present in the proppant matrix in an amount sufficient to create a desirable number of voids in the proppant matrix.

33. **(Original)** The method of claim 20 wherein the degradable material is present in the proppant composition in an amount of about 0.1% to about 30% by weight of proppant particulates in the composition.

34. **(Original)** The method of claim 20 wherein the degradable material comprises particles having a rod-like shape.

35. **(Original)** The method of claim 20 wherein the at least a portion of the voids in the proppant matrix are channel-like in shape.

36. **(Original)** The method of claim 20 wherein the proppant matrix has a conductivity equal to or greater than 4500 darcies at a pressure of about 2000 psi.

37. **(Original)** The method of claim 20 wherein the proppant matrix has a conductivity equal to or greater than 4500 darcies at a pressure of about 4000 psi.

38. **(Original)** The method of claim 20 wherein the proppant matrix has a conductivity equal to or greater than 4000 darcies at a pressure of about 6000 psi.

39. **(Currently Amended)** A proppant matrix composition comprising:
proppant particulates, the proppant particulates defining a plurality of voids
formed by an irreversible degradation of a degradable material and
~~a degradable material that undergoes an irreversible degradation downhole.~~

40. (Currently Amended) The proppant matrix composition of claim 39 wherein the proppant particulates comprise sand, walnut hulls, or man-made proppant particulates a ~~man-made proppant particulates~~.

41. (Currently Amended) The proppant matrix composition of claim 39 wherein the proppant particulates have a size of about 10 to about 60 US mesh.

42. (Currently Amended) The proppant matrix composition of claim 39 wherein the proppant matrix composition further comprises a curable resin, a tackifying agent, or both.

43. (Currently Amended) The proppant matrix composition of claim 42 wherein the curable resin comprises an epoxy, furan, phenolic, furfuryl aldehyde, or furfuryl alcohol resin.

44. (Currently Amended) The proppant matrix composition of claim 39 wherein the proppant matrix composition comprises interlocking proppant particulates.

45. (Currently Amended) The proppant matrix composition of claim 39 wherein the degradable material comprises a degradable polymer or a dehydrated salt.

46. (Currently Amended) The proppant matrix composition of claim 45 wherein the degradable polymer comprises a polysaccharide, a chitin, a chitosan, a protein, an aliphatic polyester, a poly(lactide), a poly(glycolide), a poly(ϵ -caprolactone), a poly(hydroxybutyrate), a polyanhydride, an aliphatic polycarbonate, a poly(orthoester), a poly(amino acid); a poly(ethylene oxide), or a polyphosphazene polysaccharides, chitins, chitosans, proteins, aliphatic polyesters, poly(lactides), poly(glycolides), poly(ϵ -caprolactones), poly(hydroxybutyrate)s, polyanhydrides, aliphatic polycarbonates, poly(orthoesters), poly(amino acids); poly(ethylene oxides), or polyphosphazenes.

47. (Currently Amended) The proppant matrix composition of claim 39 wherein the degradable material further comprises a plasticizer.

48. (Currently Amended) The proppant matrix composition of claim 45 wherein the dehydrated salt comprises anhydrous sodium tetraborate or anhydrous boric acid.

49. (Currently Amended) The proppant matrix composition of claim 39 wherein the degradable material comprises poly(lactic acid) and a compound chosen from the group consisting of sodium borate and boric oxide.

50. (Currently Amended) The proppant matrix composition of claim 39 wherein the degradable material comprises a stereoisomer of a poly(lactide).

51. (Currently Amended) The proppant matrix composition of claim 39 wherein the proppant particulates comprise composition comprises a bauxite proppant particulates; ~~the bauxite proppant particulates having been at least partially~~ coated with a curable epoxy resin, and wherein the degradable material comprises poly(lactic acid) a polylactic acid degradable material.

52. (Cancelled)

53. (Currently Amended) The proppant matrix composition of claim 39 wherein the degradable material comprises particles having a rod-like shape.

54. (Currently Amended) The proppant matrix composition of claim 39 wherein the degradable material comprises an inorganic or organic compound.

55. (Currently Amended) The proppant matrix composition of claim ~~54~~ 40 wherein the inorganic or organic compound comprises sodium acetate trihydrate, L-tartaric acid disodium, salt dihydrate, sodium citrate dihydrate, hydrate of an inorganic acid, hydrate of an inorganic acid salt, sodium tetraborate decahydrate, sodium hydrogenphosphate heptahydrate, sodium phosphate, dodecahydrate, amylose, starch-based hydrophilic polymer, or a cellulose-based hydrophilic polymer.

56. **(Currently Amended)** The proppant matrix composition of claim 39 wherein the degradable material is a composite.

57. **(Currently Amended)** A proppant matrix permeability enhancing composition ~~for enhancing the permeability of a proppant matrix~~ comprising proppant particulates and a degradable material.

58. **(Currently Amended)** The composition of claim 57 wherein the proppant particulates comprise sand, walnut hulls, or man-made proppant particulates ~~a man-made proppant particulates~~.

59. **(Currently Amended)** The composition of claim 57 wherein ~~57 wherein~~ the proppant particulates have a size of about 10 to about 60 US mesh.

60. **(Original)** The composition of claim 57 wherein the proppant composition further comprises a curable resin, a tackifying agent, or both.

61. **(Original)** The composition of claim 60 wherein the curable resin comprises an epoxy, furan, phenolic, furfuryl aldehyde, or furfuryl alcohol resin.

62. **(Original)** The composition of claim 57 wherein the proppant composition comprises interlocking proppant particulates.

63. **(Currently Amended)** The composition of claim 57 wherein ~~57 wherein~~ the degradable material comprises a degradable polymer or a dehydrated salt.

64. **(Currently Amended)** The composition of claim 63 wherein the degradable polymer comprises a polysaccharide, a chitin, a chitosan, a protein, an aliphatic polyester, a poly(lactide), a poly(glycolide), a poly(ϵ -caprolactone), a poly(hydroxybutyrate), a polyanhydride, an aliphatic polycarbonate, a poly(orthoester), a poly(amino acid); a poly(ethylene oxide), or a polyphosphazene ~~polysaccharides, chitins, chitosans, proteins, aliphatic polyesters, poly(lactides), poly(glycolides), poly(ϵ -caprolactones), poly(hydroxybutyrate), polyanhydrides, aliphatic polycarbonates, poly(orthoesters), poly(amino acids); poly(ethylene oxides), or polyphosphazenes.~~

65. **(Original)** The composition of claim 57 wherein the degradable material further comprises a plasticizer.

66. **(Original)** The composition of claim 63 wherein the dehydrated salt comprises anhydrous sodium tetraborate or anhydrous boric acid.

67. **(Original)** The composition of claim 57 wherein the degradable material comprises poly(lactic acid) and a compound chosen from the group consisting of sodium borate and boric oxide.

68. **(Original)** The composition of claim 57 wherein the degradable material comprises a stereoisomer of a poly(lactide).

69. **(Currently Amended)** The composition of claim 57 wherein the proppant composition comprises a poly(lactic acid) degradable material and bauxite proppant particulates, the bauxite proppant particulates having been at least partially coated with a curable epoxy resin, ~~and a polylactic acid degradable material.~~

70. **(Original)** The composition of claim 57 wherein the degradable material is present in the proppant composition in an amount of about 0.1% to about 30% by weight of proppant particulates in the proppant composition.

71. **(Original)** The composition of claim 57 wherein the degradable material comprises particles having a rod-like shape.

72. **(New)** A proppant matrix comprising proppant particulates and a plurality of voids, the plurality of voids formed by an irreversible degradation of a degradable material.